Title (en)

DETERMINATION OF AN ELEVATION MISALIGNMENT ANGLE OF A RADAR SENSOR OF A MOTOR VEHICLE

Title (de)

BESTIMMUNG EINES ELEVATIONS-DEJUSTAGEWINKELS EINES RADARSENSORS EINES KRAFTFAHRZEUGS

Title (fr)

DÉTERMINATION D'UN ANGLE D'ÉLÉVATION/DÉSALIGNEMENT D'UN CAPTEUR RADAR D'UN VÉHICULE AUTOMOBILE

Publication

EP 2999975 A1 20160330 (DE)

Application

EP 14715260 A 20140401

Priority

- DE 102013209530 A 20130523
- EP 2014056515 W 20140401

Abstract (en)

[origin: WO2014187597A1] The invention relates to a method for determining an elevation misalignment angle (φ) of a radar sensor (10) of a vehicle, comprising the steps: determination of elevation angles (α) of radar object locations in relation to a coordinate system of the radar sensor (10), wherein an elevation angle (α) of each radar objection location is determined based on radar echoes that are received having at least two antenna alignment characteristics (20, 21) that differ in the elevation direction; and determination of an elevation misalignment angle (φ) based on a frequency distribution of the elevation angle (α) of at least some of the radar object locations; and radar sensor for vehicles having an evaluation device (15) configured for carrying out the method.

IPC 8 full level

G01S 7/35 (2006.01); **G01S 7/40** (2006.01); **G01S 13/931** (2020.01)

CPC (source: EP US)

G01S 7/4026 (2013.01 - EP US); **G01S 7/4034** (2021.05 - EP); **G01S 13/424** (2013.01 - EP US); **G01S 13/931** (2013.01 - EP US); G01S 7/4034 (2021.05 - US); G01S 13/345 (2013.01 - EP US); G01S 13/4445 (2013.01 - EP US); G01S 13/4454 (2013.01 - EP US)

Citation (search report)

See references of WO 2014187597A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102013209530 A1 20141127; CN 105393135 A 20160309; CN 105393135 B 20181026; EP 2999975 A1 20160330; EP 2999975 B1 20200101; US 10126410 B2 20181113; US 2016161597 A1 20160609; WO 2014187597 A1 20141127

DOCDB simple family (application)

DE 102013209530 A 20130523; CN 201480029181 A 20140401; EP 14715260 A 20140401; EP 2014056515 W 20140401; US 201414891617 A 20140401